

PROCESSOR AND METHOD FOR WEIGHT DETECTION IN A CLOSED
LOOP DIVERSITY MODE WCDMA SYSTEM

Abstract of the Disclosure

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A receiver and method for weight detection use received channel
estimations and prior feedback information sent to a transmitter to estimate
channel weights. The estimated channel weights may have been used by a base
station to transmit diversity mode signals. In one embodiment, a trellis algorithm
10 may be used to determine weights with no significant time-slot delay. The weights
may be used to generate channel taps for use by a rake receiver in combining
multipath components of received signals. In one embodiment, the receiver and
method for weight detection may be suitable for use in closed loop diversity mode
communication systems, including a Wideband Code Division Multiple Access
15 (WCDMA) system.

"Express Mail" mailing label number: EV019077267US
Date of Deposit: January 31, 2002

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